UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,968	07/08/2003	David M. Bashant	END920000147US2	8800

45092	7590	07/27/2006

HOFFMAN, WARNICK & D'ALESSANDRO LLC
75 STATE ST
14TH FLOOR
ALBANY, NY 12207

EXAMINER
ORTIZ, BELIX M

ART UNIT	PAPER NUMBER
2164	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *5/1/2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Remarks

1. In response to communications files on 1-May-2006. Claims 9 and 10 are added and

claim 1is amended per applicant request. Therefore, claims 1-10 are presently pending in the

application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Claims 9 and 10 are unclear and very confusing, the claim was rejected as best taught and

understood by the examiner. The examiner does not understand how the storage knows that the

first data is different from the second data.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) (Eff. Filing date of div application:

10/25/2000) as being unpatentable over Zoltan (U.S. patent 6,529,917) (Eff. Filing date of

application: 8/14/2000) in view of Hagerman (U.S. pub. 2005/0044354) (Eff. Filing date of cont.

application: 10/6/2000).

As to claim 1, Zoltan teaches a system having a table of keys for synchronizing related

data elements between a first and second storage system (see fig 4 and col. 3, lines 17-24), each

key comprising:

a universal identifier corresponding to a data element in the first and second storage

system (see col. 8, lines 13-18) (wherein Zoltan teaches the checksum value which is equivalent

to universal identifier, since same values is replicated in both databases as described in col. 6,

lines 54-61);

a first record identifier corresponding to the data element in the first storage system (see

col. 3, lines 43-45); and

a second record identifier corresponding to the data element stored in the second storage

system, wherein the universal identifier, the first record identifier and the second record

identifier are used to synchronize the data element between the first and second storage system,

(see col. 5, lines 42-43), (Zoltan teaches synchronization between two databases using the

universal identifier and record identifiers of the databases as described in col. 2, lines 56-62,

Zoltan teaches all limitation and identifier columns. However, they are not elements of a single

key as claimed. They are included in a separate table).

It would have been obvious for a person with ordinary skill in the art at the time the

invention was made to incorporate different elements in a single key in a table because

it provides single tables with multiple identification keys that improves processing

performance by reducing time to search multiple tables.

Zoltan does not teach wherein the table of key is separate from the first storage system

and the second storage system.

Hagerman teaches apparatus and method for implementing spoofing and replay attack

resistant virtual zones on storage area network (see abstract), in which he teaches wherein the

table of key is separate from the first storage system and the second storage system (see figure 1

and paragraph 40).

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Zoltan by the teaching of Hagerman, because wherein the

table of key is separate from the first storage system and the second storage system, would

enable the system "The authentication code is recomputed 404 from the key and the fields of

the frame, and verified against the received authentication code 300. Received frames that can

not be verified are rejected 406. In this way, computer 100 and port 130 (FIG. 1) may be given

common keys with, and thereby permitted to communicate with, port 138 and storage system

110; while computer 102 and port 132 may be blocked from communicating, or assigned to a

different zone", (see paragraph 41).

As to claims 2-5, Zoltan as modified teaches the claimed invention as described above

with respect to claim 1. Zoltan does not specifically teach key comprising data element type

or name of the storage as claimed.

However it is common practice in the art of database to have a key with data element

type or name as is always done in spreadsheet application. An official notice is taken in this

regard. Therefore it would have been obvious for a person with ordinary skill in the art at the

time the invention was made to utilize well-known technique of utilizing keys with data element

type or storage name because it would facilitate the database administrator in retrieving the data

based on data type or storage.

As to claim 6, Zoltan as modified teaches the claimed invention of table interface and

updating the keys (see Zoltan, fig 2, element 210 and col. 3, lines 4-8).

As to claim 7, Zoltan as modified teaches the claimed invention of identifier matching

(see Zoltan, col. 2, lines 57-61). A table update system is described in (see Zoltan, col. 3, lines 4-

8).

As to claim 8, Zoltan as modified teaches the claimed invention of accessing information

from particular storage as shown in (see Zoltan, fig 8, element 804 and 806).

As to claim 9, Zoltan as modified teaches wherein the first storage system is designed to

store first data related to the data element, and wherein the first storage system is designed to

store second data related to the data element, and wherein the first data is designed to be different

from the second data (see Hagerman, figure 1).

As to claim 10, <u>Zoltan</u> as modified wherein the first and second storage system do not

separately maintain information for synchronizing the first and second storages system with each

other (see <u>Zoltan</u>, figure 4).

Response to Arguments

5. Applicant's arguments filed 1-May-2006 with respect to the rejected claims in view of the

cited references have been fully considered but they are not found persuasive:

In response to applicants' arguments that "<u>Zoltan</u> does not teach wherein the table of key

is separate from the first storage system and the second storage system", the arguments have

been fully considered but are not deemed persuasive, because <u>Zoltan</u> teaches "The authentication

code is recomputed 404 from the key and the fields of the frame, and verified against the

received authentication code 300. Received frames that can not be verified are rejected 406. In

this way, computer 100 and port 130 (FIG. 1) may be given common keys with, and thereby

permitted to communicate with, port 138 and storage system 110; while computer 102 and port

132 may be blocked from communicating, or assigned to a different zone", (see paragraph 41)

and to incorporate different elements in a single key in a table because it provides single tables

with multiple identification keys that improves processing performance by reducing time to

search multiple tables.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Belix M. Ortiz whose telephone number is 571-272-4081. The

examiner can normally be reached on moday-friday 9am-5pm.

The fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bmo

July 17, 2006

CHARLES RONES
SUPERVISORY PATENT EXAMINER